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OM nucleic - nucleic search, using sw model

Run on: January 28, 2003, 14:32:25 ; Search time 65.5 Seconds
(without alignments)
8259.203 Million cell updates/sec

Title: US-09-878-131-3
Perfect score: 1764
Sequence: 1 atggccgaaggaggaacc.....caacatgtatgtatgccaac 1764

Scoring table: IDENTITY NUC
Gapop 10.0, Gapext 1.0

Searched: 441362 seqs, 153338381 residues

Number of hits satisfying chosen parameters: 882724

Minimum DB seq length: 0
Maximum DB seq length: 200000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : Issued Patents NA:
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	1764	100.0	1764	US-09-157-397-3	Sequence 3, Appl
2	1749.8	99.2	1764	US-08-642-684-1	Sequence 1, Appl
3	1749.8	99.2	1764	US-09-157-397-1	Sequence 1, Appl
4	1749.8	99.2	1764	US-09-157-871-21	Sequence 21, Appl
5	1748.2	99.1	1770	US-08-642-684-3	Sequence 3, Appl
6	1741.8	98.7	2631	US-08-510-215A-1	Sequence 1, Appl
7	1741.8	98.7	2631	US-09-517-871-19	Sequence 19, Appl
8	1264.8	71.7	1767	US-09-517-871-5	Sequence 5, Appl
9	1263.2	71.6	1779	US-09-517-871-3	Sequence 3, Appl
10	1261.6	71.5	2631	US-09-517-871-1	Sequence 1, Appl
11	1259.2	71.4	3317	US-08-633-476-1	Sequence 1, Appl
12	1253.6	71.1	1767	US-08-436-664-24	Sequence 24, Appl
13	1253.6	71.1	1767	US-09-135-642-24	Sequence 24, Appl
14	1253.6	71.1	1767	US-08-394-232A-24	Sequence 24, Appl
15	1253.6	71.1	1767	PCT-US95-04080-26	Sequence 26, Appl
16	1253.6	71.1	1773	US-08-436-664-26	Sequence 26, Appl
17	1253.6	71.1	1773	US-09-135-642-26	Sequence 26, Appl
18	1253.6	71.1	1773	US-08-394-232A-26	Sequence 26, Appl
19	1253.6	71.1	2631	PCT-US95-04080-26	Sequence 26, Appl
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21	1253.6	71.1	2631	US-08-436-664-31	Sequence 31, Appl
22	1253.6	71.1	2631	US-08-436-664-33	Sequence 33, Appl
23	1253.6	71.1	2631	US-09-135-642-31	Sequence 31, Appl
24	1253.6	71.1	2631	US-09-135-642-33	Sequence 33, Appl
25	1253.6	71.1	2631	US-08-394-232A-31	Sequence 31, Appl
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27	1253.6	71.1	2631	US-08-394-232A-31	Sequence 31, Appl

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38	1252.4	71.0	1764	US-08-394-232A-22	Sequence 22, Appl
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40	1244.6	70.6	1779	US-08-208-823-16	Sequence 16, Appl
41	1244.6	70.6	1779	US-08-428-823-16	Sequence 16, Appl
42	1244.6	70.6	2631	US-08-208-823-13	Sequence 13, Appl
43	1244.6	70.6	2631	US-08-428-823-13	Sequence 13, Appl
44	1244.6	70.6	3252	US-08-208-823-11	Sequence 11, Appl
45	1244.6	70.6	3252	US-08-428-823-11	Sequence 11, Appl

ALIGNMENTS

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RESULT 1
US-09-157-397-3
Sequence 3, Application US/09157397
Patent No. 6,657,765
GENERAL INFORMATION:
APPLICANT: HUANG, WEI-HUA
TITLE OF INVENTION: DNA POLYMERASE HAVING ABILITY TO REDUCE INNATE
TITLE OF INVENTION: SELECTIVE DISCRIMINATION AGAINST FLUORESCENT
FILE REFERENCE: homosequencing
CURRENT FILING DATE: 1998-09-21
EARLIER FILING DATE: 1998-09-21
EARLIER FILING DATE: 1995-10-18
EARLIER APPLICATION NUMBER: 08/642,684
EARLIER FILING DATE: 1996-05-03
NUMBER OF SEQ ID NOS: 11
SOFTWARE: Patent In Ver. 2.0 - beta
SEQ ID NO 3
LENGTH: 1764
TYPE: DNA
ORGANISM: Bacillus stearothermophilus
US-09-157-397-3

Query Match      100.0% Score 1764; DB 4; Length 1764;
Best Local Similarity 100.0%; Pred. No. 0;
Matches 1764; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
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1 ATGGCCGAAGGAGAAACCGCTGAGAGATGAGATTGCGATGCGTCATATAC 60
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241 AGCATTTTGAAGCCCAAGCGGCAAGTGGCTTAAATGAGAAAGAAATGAGCTT 300
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Matches 1754; Conservative 0; Mismatches 7; Indels 0; Gaps 0;

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Db 61 GAGATGCTTCCGCAACAGGCAAGCGCTTGCTGAGAGATGAGAGAAACATACACGAT 120
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Db 1741 CCACATGATGATGATGCCAA 1761

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RESULT 3
US-09-157-397-1
; Sequence 1, Application US/09157397
; Patent No. 6165765
; GENERAL INFORMATION:
; APPLICANT: HONG, GUOFAN
; APPLICANT: HUANG, WEI-HUA
; TITLE OF INVENTION: DNA POLYMERASE HAVING ABILITY TO REDUCE INNATE
; TITLE OF INVENTION: SELECTIVE DISCRIMINATION AGAINST FLUORESCENT
; TITLE OF INVENTION: DYE-LABELLED DIDEOXYNUCLEOTIDES
; FILE REFERENCE: hongsequence1isting
; CURRENT APPLICATION NUMBER: US/09/157,397
; CURRENT FILING DATE: 1998-09-21
; EARLIER APPLICATION NUMBER: 08/544,643
; EARLIER FILING DATE: 1995-10-18
; EARLIER APPLICATION NUMBER: 08/642,684
; EARLIER FILING DATE: 1996-05-03
; NUMBER OF SEQ ID NOS: 11
; SOFTWARE: Patentin Ver. 2.0 - beta
; SEQ ID NO 1
; LENGTH: 1764
; TYPE: DNA
; ORGANISM: Bacillus stearothermophilus

US-09-157-397-1

Query Match 99.2%; Score 1749.8; DB 4; Length 1764;
 Best Local Similarity 99.6%; Pred. No. 0;
 Matches 1754; Conservative 0; Mismatches 7; Indels 0; Gaps 0;

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 Qy 1744 CCAACATGATATGATGCCAAA 1764
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RESULT 4
 US-09-517-871-21
 ; Sequence 21, Application US/09517871
 ; Patent No. 6436677

;; GENERAL INFORMATION:
 ; APPLICANT: Hartnett, John R.
 ; APPLICANT: Huang, Fen
 ; APPLICANT: Gu, Trent
 ; TITLE OF INVENTION: Method of Reverse Transcription
 ; FILE REFERENCE: PRWG-03833
 ; CURRENT APPLICATION NUMBER: US/09/517, 871
 ; CURRENT FILING DATE: 2000-03-02
 ; NUMBER OF SEQ ID NOS: 24
 ; SOFTWARE: Patent In Ver. 2.0
 ; SEQ ID NO 21
 ; LENGTH: 1764
 ; TYPE: DNA
 ; ORGANISM: Bacillus stearothermophilus
 US-09-517-871-21

QY 1 GCCGAGGGAGAAACCGCTTGAGGAGATGGAGTTTGCCATCGTTGACGTCA TTACCGAA 60

Db 1 GCCGAAGGGGAGAAACCGCTTGAGAGATGGAGTTTGCATCGTTGACGTCATTACCGAA 60
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Qy 1141 AATCTAATTGAAGCGTTCCACGCAATTTGATATTCAACAAAAACGCGATGACATT 1200
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 Qy 1201 TTCCAGTTGAGGAGAGAGAAATCAACGCGCAATGCGCGCGCAAGAGCGCTTAAC 1260
 Db 1201 TTCCAGTTGAGGAGAGAGAAATCAACGCGCAATGCGCGCGCAAGAGCGCTTAAC 1260
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 Db 1261 TTGCGTATGTTTAAAGCAATTTAGCAATTTAGCAATTTAGCAATTTAGCAATTT 1320
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 Db 1321 AAAGAAAGTCCGGAATTTATGCAAGCTTATCTTGCACGCTTCCGGCGTAAAGCAT 1380
 Qy 1381 ATGAAAAATATGACGCAAGGCAAGAAAGATATGACAAAGCTGTTGATCGG 1440
 Db 1381 ATGAAAAATATGACGCAAGGCAAGAAAGATATGACAAAGCTGTTGATCGG 1440
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 Db 1741 CCAACATGATGATGATGCCAATTA 1764

RESULT 2
 US-09-157-397-1
 ; Sequence 1, Application US/09157397

; Patent No. 6,157,765

; GENERAL INFORMATION:

; APPLICANT: HONG, GUOFAN

; APPLICANT: HUANG, WEI-HUA

; TITLE OF INVENTION: DNA POLYMERASE HAVING ABILITY TO REDUCE INNATE

; TITLE OF INVENTION: SELECTIVE DISCRIMINATION AGAINST FLUORESCENT

; FILE REFERENCE: homologous nucleotides

; CURRENT APPLICATION NUMBER: US/09/157,397

; EARLIER FILING DATE: 1998-09-21

; EARLIER APPLICATION NUMBER: 08/544,643

; EARLIER FILING DATE: 1995-10-18

; EARLIER APPLICATION NUMBER: 08/642,684

; NUMBER OF SEQ ID NOS: 11

; SOFTWARE: Patent Ver. 2.0 - beta

; SEQ ID NO 1

; LENGTH: 1764

; TYPE: DNA

; ORGANISM: Bacillus stearothermophilus

; US-09-157-397-1

Query Match 100.0%; Score 1764; DB 4; Length 1764;
 Best Local Similarity 100.0%; Pred. No. 0;

Matches 1764; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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Qy 61 GAGATGCTGGCGCAAGAGAGCGCTGCTGTTGAGTGAAGAAAGAACTACACAGAT 120
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 Db 121 GCCCGATTGTCGAGATGCACTAGTGAACGAGCATGAGCGATTTTATGCGCCGAG 180

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 Db 181 ACCGCGCTGCTGATTGCGCAATTTTACATGCTTGGCGATGAACGAGAAAAAGC 240

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 Db 301 GTCCGCTTTGATTTATTTCTGCTGCTATTTGCTCAATCCGCGTCAAGATGCGCGCAT 360

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 Db 421 GGGCAAGGCGTCAAGCGGCTGCTGCGCGCAAGAGCGCTTGCATGAGATGCTGTTGCG 480

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 Db 481 AAAGCGGAGCGCATTTGGGCGCTTGAGCAGCCGTTTATGAGCATTTGGCGAACAAG 540

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 Db 541 CAAGATCAATTTATTAACGAGCTTGAGCAGCGCTGCGCGCATTTTGGCTGAATGAA 600

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 Db 601 TTCACTGGGGTGAAGCTGATACAAAGCGGCTTGAACAGATGGTTCGAGAGTCCCGGA 660

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 Db 781 ACGAAAAAGGCTATTTGCACTTCGCTGATGCTTGAAGAGCTTGGCGCGCATGAA 840

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 Db 841 ATCGTGAAGAAATTTTGAATTAACGCGCAGCTTGGCAATCGAATCAACGTAATGAA 900

Qy 901 GGAATGTTGAAGATTGCTGCGCTGATACCGGCAAGTGCATACGATTTCAACAGCG 960
 Db 901 GGAATGTTGAAGATTGCTGCGCTGATACCGGCAAGTGCATACGATTTCAACAGCG 960

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 Db 961 CTGAGCGCAAACTGGGCGGCTCAGCTGCGCGCAAGCTGCACTTGAAGAACTTCCGAT 1020

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 Db 1201 TTCCAGTTGAGCGAAGAGAGATGACCGGCAATGCGCGCGCAAGAGCGGCTTAAAC 1260

Qy 1261 TTGCGTATGCTTTAAGGAATTTAGGATTTAGGATTTGCGGCAAACTTGAACGCGC 1320
 Db 1261 TTGCGTATGCTTTAAGGAATTTAGGATTTAGGATTTGCGGCAAACTTGAACGCGC 1320

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 Db 1321 AAAGAGCTGCGCAATTTATGCAAGCTTTCGCGAGCTTTCGCGCGTAAAGCATAT 1380

Qy 1381 ATGGAAGAAATAGTGAAGAGCGAAACAGAAAGATATGACACGCTGTTGCATCGG 1440
 Db 1381 ATGGAAGAAATAGTGAAGAGCGAAACAGAAAGATATGACACGCTGTTGCATCGG 1440

Qy 1441 CGCGGCTATTTGCTGATATTTACAGCGCGCAATTTCAACGTCGCGAGCTTTGCGAGAGCG 1500
 Db 1441 CGCGGCTATTTGCTGATATTTACAGCGCGCAATTTCAACGTCGCGAGCTTTGCGAGAGCG 1500

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 Db 1501 ACGGCAATGAACAGCGCAATTTCAAGAGAGCGCGCTGACATTTATTAAGAAAGCATAT 1560

Qy 1561 GATTAGCGGCAAGCGCTGAAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 1620
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Qy 1741 CCAACATGATGATGCGCAATTA 1764
 Db 1741 CCAACATGATGATGCGCAATTA 1764

RESULT 3
 US-09-517-871-21
 ; Sequence 21, Application US/09517871
 ; Patent No. 6436677
 ; GENERAL INFORMATION:
 ; APPLICANT: Hartnett, John R.
 ; APPLICANT: Huang, Fen
 ; TITLE OF INVENTION: Method of Reverse Transcription
 ; FILE REFERENCE: PMG-03833
 ; CURRENT APPLICATION NUMBER: US/09/517, 871
 ; CURRENT FILING DATE: 2000-03-02
 ; NUMBER OF SEQ ID NOS: 24
 ; SOFTWARE: PatentIn Ver. 2.0
 ; SEQ ID NO 21
 ; LENGTH: 1764
 ; TYPE: DNA
 ; ORGANISM: Bacillus stearothermophilus
 ; US-09-517-871-21

Query Match 100.0%; Score 1764; DB 4; Length 1764;
 Best Local Similarity 100.0%; Pred. No. 0;
 Matches 1764; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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 Db 1681 GAGGATGAG 1740
 Qy 1741 CCAACATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 1764
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RESULT 4
 US-08-642-684-3
 Sequence 3, Application US/08642684
 Patent No. 5834253
 GENERAL INFORMATION:
 APPLICANT: HONG, GUO FAN
 APPLICANT: PENG, ZHAI
 APPLICANT: HUANG, WEI-HUA
 TITLE OF INVENTION: A NEW DNA POLYMERASE WITH PROOF-READING
 TITLE OF INVENTION: 3'-5' EXONUCLEASE ACTIVITY
 NUMBER OF SEQUENCES: 15
 CORRESPONDENCE ADDRESS:
 ADDRESSEE: CUSHMAN, DAREY & CUSHMAN
 STREET: 1100 NEW YORK AVENUE, N.W.
 CITY: WASHINGTON
 STATE: D.C.
 COUNTRY: USA
 ZIP: 20005
 COMPUTER READABLE FORM:
 MEDIUM TYPE: Floppy disk
 COMPUTER: IBM PC compatible
 OPERATING SYSTEM: PC-DOS/MS-DOS
 SOFTWARE: Patent in Release #1.0, Version #1.25
 CURRENT APPLICATION DATA:

GenCore version 5.1.3
Copyright (c) 1993 - 2003 CompuGen Ltd.

OM protein - protein search, using sw model

Run on: January 27, 2003, 15:14:10 ; Search time 13.9761 Seconds
(without alignments)
1233.661 Million cell updates/sec

Title: US-09-878-131-2

Perfect score: 2952
Sequence: 1 AEGEKPLEMEFAIVDTVE.....TLRVPKVDHYGPTWYDAK 586

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 262574 seqs, 29422922 residues

Minimum DB seg length: 0
Maximum DB seg length: 200000000

Post-processing: Minimum Match 0%
Maximum Match 100%

Listing first 45 summaries

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Pred. No. is the number of results predicted by chance to have a
score greater than or equal to the score of the result being printed,
and is derived by analysis of the total score distribution.

SUMMARIES

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1	2941.5	99.6	587	2	US-08-642-684-2
2	2941.5	99.6	587	4	US-09-157-397-2
	2941.5	99.6	587	4	US-09-517-871-22
	2937.5	99.5	589	2	US-08-642-684-4
	2920.5	98.9	876	2	US-08-510-215A-2
6	2920.5	98.9	876	4	US-09-517-871-20
7	2919.5	98.9	587	2	US-08-436-664-23
8	2649.5	89.8	587	2	US-08-436-664-23
9	2649.5	89.8	587	3	US-09-135-642-23
10	2649.5	89.8	587	3	US-08-394-232A-23
11	2649.5	89.8	587	5	PCT-US95-04080-23
12	2649.5	89.8	588	2	US-08-436-664-25
13	2649.5	89.8	588	3	US-09-135-642-25
14	2649.5	89.8	588	3	US-08-394-232A-25
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44	2052.5	69.5	1276	1	US-08-717-515-8	Sequence 8, Appl
45	2048.5	69.4	876	1	US-08-717-515-4	Sequence 4, Appl

ALIGNMENTS

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RESULT 1
US-08-642-684-2
Sequence 2, Application US/08642684
Patent No. 6842684
GENERAL INFORMATION:
APPLICANT: HONG, GUO FAN
APPLICANT: HUNG, WEI-HUA
TITLE OF INVENTION: A NEW DNA POLYMERASE WITH PROOF-READING
NUMBER OF SEQUENCES: 15
CORRESPONDENCE ADDRESSES:
ADDRESSES: CUSHMAN, DARBY & CUSHMAN
STREET: 1100 NEW YORK AVENUE, N.W.
CITY: WASHINGTON
STATE: D.C.
COUNTRY: USA
ZIP: 20005
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/642,684
FILING DATE: 03-MAY-1996
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: CHAPIN, MARILYN K.
REGISTRATION NUMBER: 35,843
REFERENCE/DOCKET NUMBER: 4694/219502
TELECOMMUNICATION INFORMATION:
TELEPHONE: 202-861-3711
TELEFAX: 202-822-0944
TELEX: 6714627 CUSH
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 587 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
US-08-642-684-2
Query Match 99.6% Score 2941.5 DB 2: Length 587:
Best Local Similarity 99.8% Pred. No. 2.6e-204:
Matches 586; Conservative 0; Mismatches 0; Indels 1; Gaps 1;
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Db 181 ODOLITLKEHLAAIILAEEMFTGVNDTKRLBOMGSELAEOQLRAIEQRIYELAGQEFNN 240
Qy 241 SPKQGLVILFEKQLPVLKTKTGYSADVLEKLAIPHHEIVENILHYROLGLQSTYIE 300
Db 241 SPKQGLVILFEKQLPVLKTKTGYSADVLEKLAIPHHEIVENILHYROLGLQSTYIE 300
Qy 301 GLKVVPRDPT-KVHTMFNOALTOTGRLSAEPNLQNIPILEBGRKIROAFVSEPDMLI 359
Db 301 GLKVVPRDPT-KVHTMFNOALTOTGRLSAEPNLQNIPILEBGRKIROAFVSEPDMLI 359
Qy 360 PAADYSQIELRVLAHIAADDNLIKAFORDLDIHTKTAMDIFOLSEEBVTANMRROAKAVN 419
Db 361 PAADYSQIELRVLAHIAADDNLIKAFORDLDIHTKTAMDIFOLSEEBVTANMRROAKAVN 419
Qy 420 FGIYVIGSDYGLAQNLTITRKEAAEFIERYPASFGVKQYMEINIVQAKOKGYVTTLLHR 479
Db 421 FGIYVIGSDYGLAQNLTITRKEAAEFIERYPASFGVKQYMEINIVQAKOKGYVTTLLHR 480
Qy 480 RRYLPDITSRNFNVSFAERTAMNTPIQSSADIIKKAMIDLAAKLEOQLARLLQVH 539
Db 481 RRYLPDITSRNFNVSFAERTAMNTPIQSSADIIKKAMIDLAAKLEOQLARLLQVH 540
Qy 540 DELILEAPKEIEIRLCGLVPEVMEQAVTLRVPLKVDYHGPWTYDAK 586
Db 541 DELILEAPKEIEIRLCGLVPEVMEQAVTLRVPLKVDYHGPWTYDAK 587

RESULT 2
US-09-157-397-2
; Sequence 2, Application US/09157397
; Patent No. 6165765
; GENERAL INFORMATION:
; APPLICANT: HONG, GUOPAN
; APPLICANT: HUANG, WEI-HUA
; TITLE OF INVENTION: DNA POLYMERASE HAVING ABILITY TO REDUCE INNATE
; TITLE OF INVENTION: SELECTIVE DISCRIMINATION AGAINST FLUORESCENT
; TITLE OF INVENTION: DYE-LABELLED DIBOXYNNUCLEOTIDES
; FILE REFERENCE: hongsequence1isting
; CURRENT APPLICATION NUMBER: US/09/157,397
; CURRENT FILING DATE: 1998-09-21
; EARLIER APPLICATION NUMBER: 08/544,643
; EARLIER FILING DATE: 1995-10-18
; EARLIER APPLICATION NUMBER: 08/642,684
; EARLIER FILING DATE: 1996-05-03
; NUMBER OF SEQ ID NOS: 11
; SOFTWARE: PatentIn Ver. 2.0 - beta
; SEQ ID NO 2
; LENGTH: 587
; TYPE: PRT
; ORGANISM: Bacillus stearothermophilus
US-09-157-397-2

Query Match 99.6%; Score 2941.5; DB 4; Length 587;
Best Local Similarity 99.8%; Pred. No. 2.6e-204;
Matches 586; Conservative 0; Mismatches 0; Indels 1; Gaps 1;

Dh 61 TALADSOFLAMLADETKKSMPDAKRAVVALKMKGIELRGVAFDULLAAAYLLNPAQDAG 120
Qy 121 IAAVAKKQYEAVSDEAVYGVKGRSLPDEQTLAEHLVRKKAALWALBOPFMDLLENN 180
Db 121 IAAVAKKQYEAVSDEAVYGVKGRSLPDEQTLAEHLVRKKAALWALBOPFMDLLENN 180
Qy 181 ODOLITLKEHLAAIILAEEMFTGVNDTKRLBOMGSELAEOQLRAIEQRIYELAGQEFNN 240
Db 181 ODOLITLKEHLAAIILAEEMFTGVNDTKRLBOMGSELAEOQLRAIEQRIYELAGQEFNN 240
Qy 241 SPKQGLVILFEKQLPVLKTKTGYSADVLEKLAIPHHEIVENILHYROLGLQSTYIE 300
Db 241 SPKQGLVILFEKQLPVLKTKTGYSADVLEKLAIPHHEIVENILHYROLGLQSTYIE 300
Qy 301 GLKVVPRDPT-KVHTMFNOALTOTGRLSAEPNLQNIPILEBGRKIROAFVSEPDMLI 359
Db 301 GLKVVPRDPT-KVHTMFNOALTOTGRLSAEPNLQNIPILEBGRKIROAFVSEPDMLI 359
Qy 360 PAADYSQIELRVLAHIAADDNLIKAFORDLDIHTKTAMDIFOLSEEBVTANMRROAKAVN 419
Db 361 PAADYSQIELRVLAHIAADDNLIKAFORDLDIHTKTAMDIFOLSEEBVTANMRROAKAVN 420
Qy 420 FGIYVIGSDYGLAQNLTITRKEAAEFIERYPASFGVKQYMEINIVQAKOKGYVTTLLHR 479
Db 421 FGIYVIGSDYGLAQNLTITRKEAAEFIERYPASFGVKQYMEINIVQAKOKGYVTTLLHR 480
Qy 480 RRYLPDITSRNFNVSFAERTAMNTPIQSSADIIKKAMIDLAAKLEOQLARLLQVH 539
Db 481 RRYLPDITSRNFNVSFAERTAMNTPIQSSADIIKKAMIDLAAKLEOQLARLLQVH 540
Qy 540 DELILEAPKEIEIRLCGLVPEVMEQAVTLRVPLKVDYHGPWTYDAK 586
Db 541 DELILEAPKEIEIRLCGLVPEVMEQAVTLRVPLKVDYHGPWTYDAK 587

RESULT 3
US-09-517-871-22
; Sequence 22, Application US/09517871
; Patent No. 6436677
; GENERAL INFORMATION:
; APPLICANT: Hartnett, John R.
; APPLICANT: Huang, Fen
; APPLICANT: Gu, Trent
; TITLE OF INVENTION: Method of Reverse Transcription
; FILE REFERENCE: PRMG-03833
; CURRENT APPLICATION NUMBER: US/09/517,871
; CURRENT FILING DATE: 2000-03-02
; NUMBER OF SEQ ID NOS: 24
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 22
; LENGTH: 587
; TYPE: PRT
; ORGANISM: Bacillus stearothermophilus
US-09-517-871-22

Query Match 99.6%; Score 2941.5; DB 4; Length 587;
Best Local Similarity 99.8%; Pred. No. 2.6e-204;
Matches 586; Conservative 0; Mismatches 0; Indels 1; Gaps 1;

Qy 1 AEGKPLEMEFAIVDYTEEMLADKALVVEVMEENYHDAPIVGIALVNEHGRFPMRPE 60
Db 1 AEGKPLEMEFAIVDYTEEMLADKALVVEVMEENYHDAPIVGIALVNEHGRFPMRPE 60
Qy 61 TALADSOFLAMLADETKKSMPDAKRAVVALKMKGIELRGVAFDULLAAAYLLNPAQDAG 120

Qy 1 AEGKPLEMEFAIVDYTEEMLADKALVVEVMEENYHDAPIVGIALVNEHGRFPMRPE 60
Db 1 AEGKPLEMEFAIVDYTEEMLADKALVVEVMEENYHDAPIVGIALVNEHGRFPMRPE 60
Qy 61 TALADSOFLAMLADETKKSMPDAKRAVVALKMKGIELRGVAFDULLAAAYLLNPAQDAG 120
Db 61 TALADSOFLAMLADETKKSMPDAKRAVVALKMKGIELRGVAFDULLAAAYLLNPAQDAG 120
Qy 121 IAAVAKKQYEAVSDEAVYGVKGRSLPDEQTLAEHLVRKKAALWALBOPFMDLLENN 180
Db 121 IAAVAKKQYEAVSDEAVYGVKGRSLPDEQTLAEHLVRKKAALWALBOPFMDLLENN 180
Qy 181 ODOLITLKEHLAAIILAEEMFTGVNDTKRLBOMGSELAEOQLRAIEQRIYELAGQEFNN 240

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Db 181 QDOLLTLLEHAAIILAEMFTGVNDTKRLQWGSSELAQRLAIEQRIYELAGQEFNIN 240
Qy 241 SPKQGLVILPEKLOLPVLKTKTGYSADVLEKLAAPHHEIVENILHYROLGKOSTYIE 300
Db 241 SPKQGLVILPEKLOLPVLKTKTGYSADVLEKLAAPHHEIVENILHYROLGKOSTYIE 300
Qy 301 GLKVRPDT-KVHTMNOALTGTGRLSAEPNLONIPIRLEBGRKIROAFVSEPDMLI 359
Db 301 GLKVRPDTGVHTMNOALTGTGRLSAEPNLONIPIRLEBGRKIROAFVSEPDMLI 360
Qy 360 PAADYQIIEFLVLAHIADDDNLIEAFORDLDIHTKTAMDIFOLSEEBVTANMRQAKAVN 419
Db 361 PAADYQIIEFLVLAHIADDDNLIEAFORDLDIHTKTAMDIFOLSEEBVTANMRQAKAVN 420
Qy 420 FGIYVGISDYGLAQNLTITRKEAAEFIERYPASFGVKQYKQYKQYVTTLLHR 479
Db 421 FGIYVGISDYGLAQNLTITRKEAAEFIERYPASFGVKQYKQYKQYVTTLLHR 480
Qy 480 RRYLPDITSRNFNVSFAERTAMNTPIOGSADIIKKAMIDLAARLKEEQQLARLLQVH 539
Db 481 RRYLPDITSRNFNVSFAERTAMNTPIOGSADIIKKAMIDLAARLKEEQQLARLLQVH 540
Qy 540 DELILEAPKEIEIRLCELVPEVMEQAVTLRVPLKVDYHYGPTWYDAK 586
Db 541 DELILEAPKEIEIRLCELVPEVMEQAVTLRVPLKVDYHYGPTWYDAK 587

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RESULT 4
US-08-642-684-4
; Sequence 4, Application US/08642684
; Patent No. 5834253
; GENERAL INFORMATION:
; APPLICANT: HONG, GUO FAN
; APPLICANT: FENG, ZHAI
; APPLICANT: HUANG, WEI-HUA
; TITLE OF INVENTION: A NEW DNA POLYMERASE WITH PROOF-READING
; TITLE OF INVENTION: 3'-5' EXONUCLEASE ACTIVITY
; NUMBER OF SEQUENCES: 15
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: CUSHMAN, DARBY & CUSHMAN
; STREET: 1100 NEW YORK AVENUE, N.W.
; CITY: WASHINGTON
; STATE: D.C.
; COUNTRY: USA
; ZIP: 20005
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patentin Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/642,684
; FILING DATE: 03-MAY-1996
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: CHAPIN, MARLANA K.
; REGISTRATION NUMBER: 35,843
; REFERENCE/DOCKET NUMBER: 4694/219502
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 202-861-3711
; TELEFAX: 202-822-0944
; TELEX: 6714627 CUSH
; INFORMATION FOR SEQ ID NO: 4:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 589 amino acids
; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: peptide
; US-08-642-684-4
Query Match 99.5%; Score 2937.5; DB 2; Length 589;

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Best Local Similarity 99.7%; Pred. No. 5,1e-204;
Matches 585; Conservative 1; Mismatches 0; Indels 1; Gaps 1;

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Qy 1 ABGKPLIEMEFALVDVITEEMLADKALVVEEENYHDAPIYIGILVNEHGFRRPE 60
Db 3 AKGKPLIEMEFALVDVITEEMLADKALVVEEENYHDAPIYIGILVNEHGFRRPE 62
Qy 61 TALADSOFLMADDETKKSNFPAKRAVVALKWKGIELRGVAFDILLAAVILNPAQDAG 120
Db 63 TALADSOFLMADDETKKSNFPAKRAVVALKWKGIELRGVAFDILLAAVILNPAQDAG 122
Qy 121 IAAVAKKQYEA VSDAVY GKVKRS LPDEQTLAEHLVRAAIIWALDEPFMDLERN 180
Db 123 IAAVAKKQYEA VSDAVY GKVKRS LPDEQTLAEHLVRAAIIWALDEPFMDLERN 182
Qy 181 QDOLLTLLEHAAIILAEMFTGVNDTKRLQWGSSELAQRLAIEQRIYELAGQEFNIN 240
Db 183 QDOLLTLLEHAAIILAEMFTGVNDTKRLQWGSSELAQRLAIEQRIYELAGQEFNIN 242
Qy 241 SPKQGLVILPEKLOLPVLKTKTGYSADVLEKLAAPHHEIVENILHYROLGKOSTYIE 300
Db 243 SPKQGLVILPEKLOLPVLKTKTGYSADVLEKLAAPHHEIVENILHYROLGKOSTYIE 302
Qy 301 GLKVRPDT-KVHTMNOALTGTGRLSAEPNLONIPIRLEBGRKIROAFVSEPDMLI 359
Db 303 GLKVRPDTGVHTMNOALTGTGRLSAEPNLONIPIRLEBGRKIROAFVSEPDMLI 362
Qy 360 PAADYQIIEFLVLAHIADDDNLIEAFORDLDIHTKTAMDIFOLSEEBVTANMRQAKAVN 419
Db 363 PAADYQIIEFLVLAHIADDDNLIEAFORDLDIHTKTAMDIFOLSEEBVTANMRQAKAVN 422
Qy 420 FGIYVGISDYGLAQNLTITRKEAAEFIERYPASFGVKQYKQYKQYVTTLLHR 479
Db 423 FGIYVGISDYGLAQNLTITRKEAAEFIERYPASFGVKQYKQYKQYVTTLLHR 482
Qy 480 RRYLPDITSRNFNVSFAERTAMNTPIOGSADIIKKAMIDLAARLKEEQQLARLLQVH 539
Db 483 RRYLPDITSRNFNVSFAERTAMNTPIOGSADIIKKAMIDLAARLKEEQQLARLLQVH 542
Qy 540 DELILEAPKEIEIRLCELVPEVMEQAVTLRVPLKVDYHYGPTWYDAK 586
Db 543 DELILEAPKEIEIRLCELVPEVMEQAVTLRVPLKVDYHYGPTWYDAK 589

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RESULT 5
US-08-510-215A-2
; Sequence 2, Application US/08510215A
; Patent No. 5814506
; GENERAL INFORMATION:
; APPLICANT: KONG, Huimin
; APPLICANT: PELLETIER, John J.
; APPLICANT: ALIOTTA, Jason M.
; TITLE OF INVENTION: OVER-EXPRESSION AND PURIFICATION OF
; TITLE OF INVENTION: A TRUNCATED THERMOSTABLE DNA POLYMERASE BY PROTEIN
; TITLE OF INVENTION: FUSION
; NUMBER OF SEQUENCES: 14
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: GREGORY D. WILLIAMS; NEW ENGLAND
; ADDRESSEE: BIO LABS, INC.
; STREET: 32 TOZER ROAD
; CITY: BEVERLY
; STATE: MASSACHUSETTS
; COUNTRY: US
; ZIP: 01915
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patentin Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/510,215A
; FILING DATE: 02-AUG-1995
; CLASSIFICATION: 435

```

ATTORNEY/AGENT INFORMATION:
 NAME: WILLIAMS, GREGORY D.
 REGISTRATION NUMBER: 30901
 REFERENCE/DOCKET NUMBER: NEB-113
 TELECOMMUNICATION INFORMATION:
 TELEPHONE: (508) 927-5054
 TELEFAX: (508) 927-1705
 INFORMATION FOR SEQ ID NO: 2:
 SEQUENCE CHARACTERISTICS:
 LENGTH: 876 amino acids
 TYPE: amino acid
 TOPOLOGY: linear
 MOLECULE TYPE: protein
 US-08-510-215A-2

Query Match 98.9%; Score 2920.5; DB 2; Length 876;
 Best Local Similarity 99.1%; Pred. No. 1.4e-202;
 Matches 582; Conservative 1; Mismatches 3; Indels 1; Gaps 1;

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1  AGEKPLEEMFAIVDVTTEMLADKALVVEEENYHDAPIVGIALVNEHGRPFMRPE 60
290  AGEKPLEEMFAIVDVTTEMLADKALVVEEENYHDAPIVGIALVNEHGRPFMRPE 349
61  TALADQFLAMLADETKKSMFPAKRAVVALKKKGIELRGVAFDILLAAVLLNPADQAGD 120
350  TALADQFLAMLADETKKSMFPAKRAVVALKKKGIELRGVAFDILLAAVLLNPADQAGD 409
121  IAAVAKMKQYEAVRSDAVYGVKRSLEPDEQTLAEHLVRKAAIWMLEQPFMDLRRNE 180
410  IAAVAKMKQYEAVRSDAVYGVKRSLEPDEQTLAEHLVRKAAIWMLEQPFMDLRRNE 469
181  QDQLTKLEHAAIILAEHFTGVNDTKLEQWSELAQLRAIEORIVELAGOEFIN 240
470  QDQLTKLEHAAIILAEHFTGVNDTKLEQWSELAQLRAIEORIVELAGOEFIN 529
241  SPKQLGVILFEKQLPVLKKTGTGYSADVLEKLAIPHHEIYENILHYROLGKLOSTYIE 300
530  SPKQLGVILFEKQLPVLKKTGTGYSADVLEKLAIPHHEIYENILHYROLGKLOSTYIE 589
301  GLKVVPRPT-KVHTWPNQALTOTGRLSAEPNLONIPRIIEGKRIROAFVSEPDMLI 359
590  GLKVVPRPT-KVHTWPNQALTOTGRLSAEPNLONIPRIIEGKRIROAFVSEPDMLI 649
360  FAADYSQIELRLAHLADDDNLIIEAFORDLIHTKTAMDI FOLSEEVYANMRQAKAN 419
650  FAADYSQIELRLAHLADDDNLIIEAFORDLIHTKTAMDI FHVSEEVYANMRQAKAN 709
420  FGIYVGISDYGLAQNLTTRKEAEFIERYPASFPVKQYKYMENIYQEAOKQGYVTTLHR 479
10  FGIYVGISDYGLAQNLTTRKEAEFIERYPASFPVKQYKYMENIYQEAOKQGYVTTLHR 769
480  RRYLPDITSRNFNVSFAERTAMNTPIQSSADIIKKAMIDLAARKEBOLQARLLQVH 539
770  RRYLPDITSRNFNVSFAERTAMNTPIQSSADIIKKAMIDLAARKEBOLQARLLQVH 829
540  DELILEAPKEIERLCELVPEVMEQAVTLRVPLKVDYHYGPTWYDAK 586
830  DELILEAPKEIERLCELVPEVMEQAVTLRVPLKVDYHYGPTWYDAK 876

```

RESULT 6
 US-09-517-871-20
 Sequence 20, Application US/0951871
 Patent No. 6436677
 GENERAL INFORMATION:
 APPLICANT: Hartnec, John R.
 APPLICANT: Huang, Fen
 TITLE OF INVENTION: Method of Reverse Transcription
 FILE REFERENCE: PRMG-03833
 CURRENT APPLICATION NUMBER: US/09/517, 871
 NUMBER OF SEQ-ID NOS: 24

SOFTWARE: PatentIn Ver. 2.0
 SEQ ID NO 20
 LENGTH: 876
 TYPE: PRT
 ORGANISM: Bacillus stearothermophilus
 US-09-517-871-20

Query Match 98.9%; Score 2920.5; DB 4; Length 876;
 Best Local Similarity 99.1%; Pred. No. 1.4e-202;
 Matches 582; Conservative 1; Mismatches 3; Indels 1; Gaps 1;

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1  AGEKPLEEMFAIVDVTTEMLADKALVVEEENYHDAPIVGIALVNEHGRPFMRPE 60
290  AGEKPLEEMFAIVDVTTEMLADKALVVEEENYHDAPIVGIALVNEHGRPFMRPE 349
61  TALADQFLAMLADETKKSMFPAKRAVVALKKKGIELRGVAFDILLAAVLLNPADQAGD 120
350  TALADQFLAMLADETKKSMFPAKRAVVALKKKGIELRGVAFDILLAAVLLNPADQAGD 409
121  IAAVAKMKQYEAVRSDAVYGVKRSLEPDEQTLAEHLVRKAAIWMLEQPFMDLRRNE 180
410  IAAVAKMKQYEAVRSDAVYGVKRSLEPDEQTLAEHLVRKAAIWMLEQPFMDLRRNE 469
181  QDQLTKLEHAAIILAEHFTGVNDTKLEQWSELAQLRAIEORIVELAGOEFIN 240
470  QDQLTKLEHAAIILAEHFTGVNDTKLEQWSELAQLRAIEORIVELAGOEFIN 529
241  SPKQLGVILFEKQLPVLKKTGTGYSADVLEKLAIPHHEIYENILHYROLGKLOSTYIE 300
530  SPKQLGVILFEKQLPVLKKTGTGYSADVLEKLAIPHHEIYENILHYROLGKLOSTYIE 589
301  GLKVVPRPT-KVHTWPNQALTOTGRLSAEPNLONIPRIIEGKRIROAFVSEPDMLI 359
590  GLKVVPRPT-KVHTWPNQALTOTGRLSAEPNLONIPRIIEGKRIROAFVSEPDMLI 649
360  FAADYSQIELRLAHLADDDNLIIEAFORDLIHTKTAMDI FOLSEEVYANMRQAKAN 419
650  FAADYSQIELRLAHLADDDNLIIEAFORDLIHTKTAMDI FHVSEEVYANMRQAKAN 709
420  FGIYVGISDYGLAQNLTTRKEAEFIERYPASFPVKQYKYMENIYQEAOKQGYVTTLHR 479
710  FGIYVGISDYGLAQNLTTRKEAEFIERYPASFPVKQYKYMENIYQEAOKQGYVTTLHR 769
480  RRYLPDITSRNFNVSFAERTAMNTPIQSSADIIKKAMIDLAARKEBOLQARLLQVH 539
770  RRYLPDITSRNFNVSFAERTAMNTPIQSSADIIKKAMIDLAARKEBOLQARLLQVH 829
540  DELILEAPKEIERLCELVPEVMEQAVTLRVPLKVDYHYGPTWYDAK 586
830  DELILEAPKEIERLCELVPEVMEQAVTLRVPLKVDYHYGPTWYDAK 876

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RESULT 7
 US-09-157-397-4
 Sequence 4, Application US/09157397
 Patent No. 6165765
 GENERAL INFORMATION:
 APPLICANT: HONG, GUOFAN
 APPLICANT: HONG, WEI-HUA
 TITLE OF INVENTION: DNA POLYMERASE HAVING ABILITY TO REDUCE INNATE
 TITLE OF INVENTION: SELECTIVE DISCRIMINATION AGAINST FLUORESCENT
 FILE REFERENCE: hongsequencelisting
 CURRENT APPLICATION NUMBER: US/09/157,397
 EARLIER FILING DATE: 1998-09-21
 EARLIER FILING DATE: 1995-10-18
 EARLIER APPLICATION NUMBER: 08/642,684
 EARLIER FILING DATE: 1996-05-03
 NUMBER OF SEQ ID NOS: 11
 SOFTWARE: PatentIn Ver. 2.0 - beta
 SEQ ID NO 4
 LENGTH: 588

QY 301 EGLLKVRPDTGKVHTMFGALQTGRSSAEPNLQNIPIRTPLGKKIRQA FVVPSEPDWL 360

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Db 301 EGLKVRPDTGKVTMTFQALITGRSSAEPNIONIPRTPLRKIRQAIVPSPDWL 360
Qy 361 IFAADYSQIELRLVLAHIADDDNLIEAFORDLDIHTKTAMDFOLSEEEVTANMRROAKAV 420
Db 361 IFAADYSQIELRLVLAHIADDDNLIEAFORDLDIHTKTAMDFOLSEEEVTANMRROAKAV 420
Qy 421 NYGIYGISDYGLAQNLTTRKEAAEFIERFASFPGVQYMENTVOEAKOKGYVTTLLH 480
Db 421 NYGIYGISDYGLAQNLTTRKEAAEFIERFASFPGVQYMENTVOEAKOKGYVTTLLH 480
Qy 481 RRRYPDITSRNFNVSFAERTAMNTPIOGSAADIIKKAMIDLAARLKEEQOARLLQV 540
Db 481 RRRYPDITSRNFNVSFAERTAMNTPIOGSAADIIKKAMIDLAARLKEEQOARLLQV 540
Qy 541 HDELLEAPKEIEIRLCELVPPEVMEQAVTLRVPLKVDYHYGPTWDAK 588
Db 541 HDELLEAPKEIEIRLCELVPPEVMEQAVTLRVPLKVDYHYGPTWDAK 588

|||||
Sequence 2, Application US/08642684
Patent No. 5834253
GENERAL INFORMATION:
APPLICANT: HONG, GUO FAN
APPLICANT: FENG, ZHAI
APPLICANT: HUANG, WEI-HUA
TITLE OF INVENTION: A NEW DNA POLYMERASE WITH PROOF-READING
TITLE OF INVENTION: 3'-5' EXONUCLEASE ACTIVITY
NUMBER OF SEQUENCES: 15
CORRESPONDENCE ADDRESS:
ADDRESSEE: CUSHMAN, DARBY & CUSHMAN
STREET: 1100 NEW YORK AVENUE, N.W.
CITY: WASHINGTON
STATE: D.C.
COUNTRY: USA
ZIP: 20005
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/642,684
FILING DATE: 03-MAY-1996
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: CHAPIN, MARLANA K.
REGISTRATION NUMBER: 35, 843
REFERENCE/DOCKET NUMBER: 4694/219502
TELECOMMUNICATION INFORMATION:
TELEPHONE: 202-861-3711
TELEFAX: 202-822-0944
TELEX: 6714627 CUSH
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 587 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
US-08-642-684-2

Query Match 99.0%; Score 2936; DB 2; Length 587;
Best Local Similarity 99.3%; Pred. No. 1.3e-211;
Matches 583; Conservative 1; Mismatches 3; Indels 0; Gaps 0;

Qy 2 AAGEKPLEMEFAIVDITEEMLADKALVVEVMEENYHDAPIVGIALVNEHGRFMRPE 61
Db 1 AAGEKPLEMEFAIVDITEEMLADKALVVEVMEENYHDAPIVGIALVNEHGRFMRPE 60
Qy 62 TALADSQFLAMLADETKKKSMFDAKRAVVALKWKGIELRGVAFDILLAAVYLLNPADAGD 121

|||||
Db 61 TALADSQFLAMLADETKKKSMFDAKRAVVALKWKGIELRGVAFDILLAAVYLLNPADAGD 120
Qy 122 IAAVAKKQYAVRSDEAVYKGYRSI, PDEQTLAEHLVRKAALIMALEOPFMDLRNNE 181
Db 121 IAAVAKKQYAVRSDEAVYKGYRSI, PDEQTLAEHLVRKAALIMALEOPFMDLRNNE 180
Qy 182 QDOLLTKLEHALLAEEMEFTGVNDTKRLEOMGSELAEQRAIEORIEYELAGQEFNIN 241
Db 181 QDOLLTKLEHALLAEEMEFTGVNDTKRLEOMGSELAEQRAIEORIEYELAGQEFNIN 240
Qy 242 SPKOLGVLFEKQLPULKTKTGYSTSDVLEKLAHPHEVENVINLHROLGKQSTYIE 301
Db 241 SPKOLGVLFEKQLPULKTKTGYSTSDVLEKLAHPHEVENVINLHROLGKQSTYIE 300
Qy 302 GLKVRPDTGKVTMTFQALITGRSSAEPNIONIPRTPLRKIRQAIVPSPDWLI 361
Db 301 GLKVRPDTGKVTMTFQALITGRSSAEPNIONIPRTPLRKIRQAIVPSPDWLI 360
Qy 362 FAADYSQIELRLVLAHIADDDNLIEAFORDLDIHTKTAMDFOLSEEEVTANMRROAKAV 421
Db 361 FAADYSQIELRLVLAHIADDDNLIEAFORDLDIHTKTAMDFOLSEEEVTANMRROAKAV 420
Qy 422 YGIYVIGISDYGLAQNLTTRKEAAEFIERFASFPGVQYMENTVOEAKOKGYVTTLLH 481
Db 421 YGIYVIGISDYGLAQNLTTRKEAAEFIERFASFPGVQYMENTVOEAKOKGYVTTLLH 480
Qy 482 RRRYPDITSRNFNVSFAERTAMNTPIOGSAADIIKKAMIDLAARLKEEQOARLLQV 541
Db 481 RRRYPDITSRNFNVSFAERTAMNTPIOGSAADIIKKAMIDLAARLKEEQOARLLQV 540
Qy 542 DELLEAPKEIEIRLCELVPPEVMEQAVTLRVPLKVDYHYGPTWDAK 588
Db 541 DELLEAPKEIEIRLCELVPPEVMEQAVTLRVPLKVDYHYGPTWDAK 587

|||||
RESULT 3
US-09-157-397-2
Sequence 2, Application US/09157397
Patent No. 6165765
GENERAL INFORMATION:
APPLICANT: HONG, GUOFAN
APPLICANT: HUANG, WEI-HUA
TITLE OF INVENTION: DNA POLYMERASE HAVING ABILITY TO REDUCE INNATE
TITLE OF INVENTION: SELECTIVE DISCRIMINATION AGAINST FLUORESCENT
TITLE OF INVENTION: DYE-LABELLED DIDEOXYNUCLEOTIDES
FILE REFERENCE: hongsequencelisting
CURRENT APPLICATION NUMBER: US/09/157,397
CURRENT FILING DATE: 1998-09-21
EARLIER APPLICATION NUMBER: 08/544,643
EARLIER FILING DATE: 1995-10-18
EARLIER APPLICATION NUMBER: 08/642,684
EARLIER FILING DATE: 1996-05-03
NUMBER OF SEQ ID NOS: 11
SOFTWARE: Patentin Ver. 2.0 - beta
SEQ ID NO 2
LENGTH: 587
TYPE: PRT
ORGANISM: Bacillus stearothermophilus
US-09-157-397-2

Query Match 99.0%; Score 2936; DB 4; Length 587;
Best Local Similarity 99.3%; Pred. No. 1.3e-211;
Matches 583; Conservative 1; Mismatches 3; Indels 0; Gaps 0;

Qy 2 AAGEKPLEMEFAIVDITEEMLADKALVVEVMEENYHDAPIVGIALVNEHGRFMRPE 61
Db 1 AAGEKPLEMEFAIVDITEEMLADKALVVEVMEENYHDAPIVGIALVNEHGRFMRPE 60
Qy 62 TALADSQFLAMLADETKKKSMFDAKRAVVALKWKGIELRGVAFDILLAAVYLLNPADAGD 121
Db 61 TALADSQFLAMLADETKKKSMFDAKRAVVALKWKGIELRGVAFDILLAAVYLLNPADAGD 120

QY 122 IAAVAKMAYEAVSDEAVYGVGRSLPDEQTLAEHLVRKAAAIWALQEPMDLARNNE 181
 DB 121 IAAVAKMAYEAVSDEAVYGVGRSLPDEQTLAEHLVRKAAAIWALQEPMDLARNNE 180
 QY 182 QDOLITKLEHAAIAALAEWFTGVNVDTKRLAEQWSELAEOURAIEORIYELAGEFNNIN 241
 DB 181 QDOLITKLEHAAIAALAEWFTGVNVDTKRLAEQWSELAEOURAIEORIYELAGEFNNIN 240
 QY 242 SPKQGLVILFEKQLPVLKTKTKTGYSTSDVLEKLAHPHEIYENILHYRQLGKQSTYIE 301
 DB 241 SPKQGLVILFEKQLPVLKTKTKTGYSTSDVLEKLAHPHEIYENILHYRQLGKQSTYIE 300
 QY 302 GLKVRPDTGKVTHTMNOALTOTGRLSAEPNLONIPRTPLGRKIROAFVPEPDLI 361
 DB 301 GLKVRPDTGKVTHTMNOALTOTGRLSAEPNLONIPRTPLGRKIROAFVPEPDLI 360
 QY 362 PAADYSQIEELRVLAHIADDDNLIEAFORDLDIHTKTAMDIFOLSEEVYANMRROAKAVN 421
 DB 361 PAADYSQIEELRVLAHIADDDNLIEAFORDLDIHTKTAMDIFOLSEEVYANMRROAKAVN 420
 QY 422 YGIYVGISDYGLAQNLTTRKEAEFIERYPASFGVQYQYQYQYQYQYQYQYQYQYQY 481
 DB 421 YGIYVGISDYGLAQNLTTRKEAEFIERYPASFGVQYQYQYQYQYQYQYQYQYQYQY 480
 QY 482 RRYLPDITSRNFNVSFAERTAMNTPIOGSADIIKKAMIDLAARLKEBOLQARLLQVH 541
 DB 481 RRYLPDITSRNFNVSFAERTAMNTPIOGSADIIKKAMIDLAARLKEBOLQARLLQVH 540
 QY 542 DELILEAPKEIEIRLCELVEPWEQAVTLRVPLKVDYHGYPTWYDAK 588
 DB 541 DELILEAPKEIEIRLCELVEPWEQAVTLRVPLKVDYHGYPTWYDAK 587

RESULT 4

US-09-517-871-22
 : Sequence 22, Application US/09517871
 : Patent No. 6436677
 : GENERAL INFORMATION:
 : APPLICANT: Hartnett, John R.
 : APPLICANT: Huang, Fen
 : APPLICANT: Gu, Trent
 : TITLE OF INVENTION: Method of Reverse Transcription
 : FILE REFERENCE: PRMG-03833
 : CURRENT APPLICATION NUMBER: US/09/517,871
 : CURRENT FILING DATE: 2000-03-02
 : NUMBER OF SEQ ID NOS: 24
 : SOFTWARE: PatentIn Ver. 2.0
 : SEQ ID NO 22
 : LENGTH: 587
 : PRG: PRT
 : ORGANISM: Bacillus stearothermophilus
 US-09-517-871-22

Query Match 99.0%; Score 2936; DB 4; Length 587;

Best Local Similarity 99.3%; Pred No. 1.3e-211; Matches 583; Conservative 1; Mismatches 3; Indels 0; Gaps 0;

QY 2 AEGEKPLEMEFAIVDVTIEEMLADRAALVVEVMEENYHDAPVIGALVNEHGRFMRPE 61
 DB 1 AEGEKPLEMEFAIVDVTIEEMLADRAALVVEVMEENYHDAPVIGALVNEHGRFMRPE 60
 QY 62 TALADSQFLAMLADETKTKSMFPAKAAVVALKKKGITLRVAAVDLLAAATLNPADAGD 121
 DB 61 TALADSQFLAMLADETKTKSMFPAKAAVVALKKKGITLRVAAVDLLAAATLNPADAGD 120
 QY 122 IAAVAKMAYEAVSDEAVYGVGRSLPDEQTLAEHLVRKAAAIWALQEPMDLARNNE 181
 DB 121 IAAVAKMAYEAVSDEAVYGVGRSLPDEQTLAEHLVRKAAAIWALQEPMDLARNNE 180
 QY 182 QDOLITKLEHAAIAALAEWFTGVNVDTKRLAEQWSELAEOURAIEORIYELAGEFNNIN 241
 DB 181 QDOLITKLEHAAIAALAEWFTGVNVDTKRLAEQWSELAEOURAIEORIYELAGEFNNIN 240

QY 242 SPKQGLVILFEKQLPVLKTKTKTGYSTSDVLEKLAHPHEIYENILHYRQLGKQSTYIE 301
 DB 241 SPKQGLVILFEKQLPVLKTKTKTGYSTSDVLEKLAHPHEIYENILHYRQLGKQSTYIE 300
 QY 302 GLKVRPDTGKVTHTMNOALTOTGRLSAEPNLONIPRTPLGRKIROAFVPEPDLI 361
 DB 301 GLKVRPDTGKVTHTMNOALTOTGRLSAEPNLONIPRTPLGRKIROAFVPEPDLI 360
 QY 362 PAADYSQIEELRVLAHIADDDNLIEAFORDLDIHTKTAMDIFOLSEEVYANMRROAKAVN 421
 DB 361 PAADYSQIEELRVLAHIADDDNLIEAFORDLDIHTKTAMDIFOLSEEVYANMRROAKAVN 420
 QY 422 YGIYVGISDYGLAQNLTTRKEAEFIERYPASFGVQYQYQYQYQYQYQYQYQYQYQY 481
 DB 421 YGIYVGISDYGLAQNLTTRKEAEFIERYPASFGVQYQYQYQYQYQYQYQYQYQYQY 480
 QY 482 RRYLPDITSRNFNVSFAERTAMNTPIOGSADIIKKAMIDLAARLKEBOLQARLLQVH 541
 DB 481 RRYLPDITSRNFNVSFAERTAMNTPIOGSADIIKKAMIDLAARLKEBOLQARLLQVH 540
 QY 542 DELILEAPKEIEIRLCELVEPWEQAVTLRVPLKVDYHGYPTWYDAK 588
 DB 541 DELILEAPKEIEIRLCELVEPWEQAVTLRVPLKVDYHGYPTWYDAK 587

RESULT 5

US-08-642-684-4

: Sequence 4, Application US/08642684
 : Patent No. 5834253

: GENERAL INFORMATION:

: APPLICANT: HONG, GUO FAN

: APPLICANT: PENG, ZHAI

: APPLICANT: HUANG, WEI-HUA

: TITLE OF INVENTION: A NEW DNA POLYMERASE WITH PROOF-READING

: NUMBER OF SEQUENCES: 15

: CORRESPONDENCE ADDRESSES:

: ADDRESSEE: CUSHMAN, DARBY & CUSHMAN

: STREET: 1100 NEW YORK AVENUE, N.W.

: CITY: WASHINGTON

: STATE: D.C.

: COUNTRY: USA

: ZIP: 20005

: COMPUTER READABLE FORM:

: MEDIUM TYPE: Floppy disk

: COMPUTER: IBM PC compatible

: OPERATING SYSTEM: PC-DOS/MS-DOS

: SOFTWARE: PatentIn Release #1.0, Version #1.25

: CURRENT APPLICATION DATA:

: APPLICATION NUMBER: US/08/642,684

: FILING DATE: 03-MAY-1996

: CLASSIFICATION: 435

: ATTORNEY/AGENT INFORMATION:

: NAME: CHAPIN, MARIANA K.

: REGISTRATION NUMBER: 35,843

: REFERENCE/DOCKET NUMBER: 4694/219502

: TELECOMMUNICATION INFORMATION:

: TELEPHONE: 202-861-3711

: TELEFAX: 202-822-0944

: TELEX: 6714627 CUSH

: INFORMATION FOR SEQ ID NO: 4:

: SEQUENCE CHARACTERISTICS:

: LENGTH: 589 amino acids

: TYPE: amino acid

: STRANDEDNESS: single

: TOPOLOGY: linear

: MOLECULE TYPE: peptide

US-08-642-684-4

Query Match 98.9%; Score 2932; DB 2; Length 589;
 Best Local Similarity 99.1%; Pred. No. 2.6e-211;
 Matches 582; Conservative 2; Mismatches 3; Indels 0; Gaps 0;

QY 122 TAAVAKMOYEAVRSDEAVYGVKGRSLPDEOTLAELHVRKAAAIWALEQPMDDLRNNE 181
DB 121 TAAVAKMOYEAVRSDEAVYGVKGRSLPDEOTLAELHVRKAAAIWALEQPMDDLRNNE 180
QY 182 ODQLLTLEHALAAI LAEMEFTGVNVDTKRLEQMGSELAELAEQRAIYELAGQEFNIN 241
DB 181 ODQLLTLEHALAAI LAEMEFTGVNVDTKRLEQMGSELAELAEQRAIYELAGQEFNIN 240
QY 242 SPKQGVILFEKQLPVLKTKTGYSTSDVLEKLAHPHEIVENILHYROLKGLQSTYIE 301
DB 241 SPKQGVILFEKQLPVLKTKTGYSTSDVLEKLAHPHEIVENILHYROLKGLQSTYIE 300
QY 302 GLLKVVPRDPTGKVTMFPNQALTOTGRSSAEPNLQNIPIRTPLGRKIROAFVPSPPDWLI 361
DB 301 GLLKVVPRDPTGKVTMFPNQALTOTGRSSAEPNLQNIPIRTPLGRKIROAFVPSPPDWLI 360
QY 362 PAADYSQIELRVLAHIAADDNDLIEAFQRLDLDIHTKTAMDIFOLSEEEVTANNRQAKAVN 421
DB 361 PAADYSQIELRVLAHIAADDNDLIEAFQRLDLDIHTKTAMDIFOLSEEEVTANNRQAKAVN 420
QY 422 YGIVYGISDYGLAQNLIITRKEAAEFIERYPASFPGVKQYMENIVQEAQKQGYVTTLLHR 481
DB 421 YGIVYGISDYGLAQNLIITRKEAAEFIERYPASFPGVKQYMENIVQEAQKQGYVTTLLHR 480
QY 482 RYLPDITSRNFRNVSFAERTAMNTPIQGSAADIKKAMIDLAAARLKEEQLOARLLLOVH 541
DB 481 RYLPDITSRNFRNVSFAERTAMNTPIQGSAADIKKAMIDLAAARLKEEQLOARLLLOVH 540
QY 542 DELILEAPKEEIERLCELVPVMEQAVTLRVPLKVDYHYGPTWYDAK 588
DB 541 DELILEAPKEEIERLCELVPVMEQAVTLRVPLKVDYHYGPTWYDAK 587

RESULT 4

US-09-517-871-22
; Sequence 22, Application US/09517871
; Patent No. 6436677

; GENERAL INFORMATION:
; APPLICANT: Hartnett, John R.
; APPLICANT: Huang, Fen
; APPLICANT: Gu, Trent
; TITLE OF INVENTION: Method of Reverse Transcription
; FILE REFERENCE: FRG-03833
; CURRENT APPLICATION NUMBER: US/09/517,871
; CURRENT FILING DATE: 2000-03-02
; NUMBER OF SEQ ID NOS: 24
; SOFTWARE: PatentIn Ver. 2.0
; Q ID NO 22
; LENGTH: 587
; TYPE: PRT
; ORGANISM: Bacillus stearothermophilus
US-09-517-871-22

Query Match 99.0%; Score 2936; DB 4; Length 587;
Best Local Similarity 99.3%; Pred. No. 1.3e-211;
Matches 583; Conservative 1; Mismatches 3; Indels 0; Gaps 0;

QY 2 AEGEKPLEEMEFALVDVITEMLADKAALVVEVMEENYHDAPIVGIALVNEHGRFFWRPE 61
DB 1 AEGEKPLEEMEFALVDVITEMLADKAALVVEVMEENYHDAPIVGIALVNEHGRFFWRPE 60
QY 62 TALADSQFLAWLADETKKSMFMDKRAVVALKWGIELRGVAFDLLLLAAAYLLNPAQDAGD 121
DB 61 TALADSQFLAWLADETKKSMFMDKRAVVALKWGIELRGVAFDLLLLAAAYLLNPAQDAGD 120
QY 122 TAAVAKMOYEAVRSDEAVYGVKGRSLPDEOTLAELHVRKAAAIWALEQPMDDLRNNE 181
DB 121 TAAVAKMOYEAVRSDEAVYGVKGRSLPDEOTLAELHVRKAAAIWALEQPMDDLRNNE 180
QY 182 ODQLLTLEHALAAI LAEMEFTGVNVDTKRLEQMGSELAELAEQRAIYELAGQEFNIN 241
DB 181 ODQLLTLEHALAAI LAEMEFTGVNVDTKRLEQMGSELAELAEQRAIYELAGQEFNIN 240

QY 242 SPKQGVILFEKQLPVLKTKTGYSTSDVLEKLAHPHEIVENILHYROLKGLQSTYIE 301
DB 241 SPKQGVILFEKQLPVLKTKTGYSTSDVLEKLAHPHEIVENILHYROLKGLQSTYIE 300
QY 302 GLLKVVPRDPTGKVTMFPNQALTOTGRSSAEPNLQNIPIRTPLGRKIROAFVPSPPDWLI 361
DB 301 GLLKVVPRDPTGKVTMFPNQALTOTGRSSAEPNLQNIPIRTPLGRKIROAFVPSPPDWLI 360
QY 362 PAADYSQIELRVLAHIAADDNDLIEAFQRLDLDIHTKTAMDIFOLSEEEVTANNRQAKAVN 421
DB 361 PAADYSQIELRVLAHIAADDNDLIEAFQRLDLDIHTKTAMDIFOLSEEEVTANNRQAKAVN 420
QY 422 YGIVYGISDYGLAQNLIITRKEAAEFIERYPASFPGVKQYMENIVQEAQKQGYVTTLLHR 481
DB 421 YGIVYGISDYGLAQNLIITRKEAAEFIERYPASFPGVKQYMENIVQEAQKQGYVTTLLHR 480
QY 482 RYLPDITSRNFRNVSFAERTAMNTPIQGSAADIKKAMIDLAAARLKEEQLOARLLLOVH 541
DB 481 RYLPDITSRNFRNVSFAERTAMNTPIQGSAADIKKAMIDLAAARLKEEQLOARLLLOVH 540
QY 542 DELILEAPKEEIERLCELVPVMEQAVTLRVPLKVDYHYGPTWYDAK 588
DB 541 DELILEAPKEEIERLCELVPVMEQAVTLRVPLKVDYHYGPTWYDAK 587

RESULT 5

US-08-642-684-4
; Sequence 4, Application US/08642684
; Patent No. 5834253

; GENERAL INFORMATION:
; APPLICANT: HONG, GUO PAN
; APPLICANT: PENG, ZHAI
; APPLICANT: HUANG, WEI-HUA
; TITLE OF INVENTION: A NEW DNA POLYMERASE WITH PROOF-READING
; NUMBER OF SEQUENCES: 15
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: CUSHMAN, DAREY & CUSHMAN
; STREET: 1100 NEW YORK AVENUE, N.W.
; CITY: WASHINGTON
; STATE: D.C.
; COUNTRY: USA
; ZIP: 20005
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/642,684
; FILING DATE: 03-MAY-1996
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: CHAPIN, MARLANA K.
; REGISTRATION NUMBER: 35,843
; REFERENCE/DOCKET NUMBER: 4694/219502
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 202-861-3711
; TELEFAX: 202-822-0944
; TELEX: 6714627 CUSH
; INFORMATION FOR SEQ ID NO: 4:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 589 amino acids
; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: peptide
US-08-642-684-4

Query Match 98.9%; Score 2932; DB 2; Length 589;
Best Local Similarity 99.1%; Pred. No. 2.6e-214;
Matches 582; Conservative 2; Mismatches 3; Indels 0; Gaps 0;

QY	2	AEGEPLEEMERAIYDVITEEHLAKALVEMEENYDAIYIGIALVNEGRFEMPE	61
Db	3	AKGEPELEMERAIYDVITEEHLAKALVEMEENYDAIYIGIALVNEGRFEMPE	62
QY	62	TALADSOFLAMLADETKKXSMFADARAVALKMGJELRGVAFDILLAYILNPAQDAD	121
Db	63	TALADSOFLAMLADETKKXSMFADARAVALKMGJELRGVAFDILLAYILNPAQDAD	122
QY	122	IAAVAKMKOYEAVRSDAEVYGGVGRSLPDEQTLAHLVRKAAAIWALBQPMDDLNN	181
Db	123	IAAVAKMKOYEAVRSDAEVYGGVGRSLPDEQTLAHLVRKAAAIWALBQPMDDLNN	182
QY	182	ODOLLTKLEHALAALIAEMEPFNVDTRGLBOMGSELAEOLRAIEORLYELAGOEFIN	241
Db	183	ODOLLTKLEHALAALIAEMEPFNVDTRGLBOMGSELAEOLRAIEORLYELAGOEFIN	242
QY	242	SPKQGVILLFEKQLPVLKTKTKTGVSADVLEKLA PHNIEYENILHYROLGKLOSTYIE	301
Db	243	SPKQGVILLFEKQLPVLKTKTKTGVSADVLEKLA PHNIEYENILHYROLGKLOSTYIE	302
QY	302	GLLKTVRPDPTGKVHTMFNOALTQOTGRLSABPNLONIPIRTPLGRKIROAPVSEBDMI	361
Db	303	GLLKTVRPDPTGKVHTMFNOALTQOTGRLSABPNLONIPIRTPLGRKIROAPVSEBDMI	362
QY	362	PAADSOJELRVLAAHADDNILEAFORPLDHTHTAMDI FOLSEEVYANNRROKAVN	421
Db	363	PAADSOJELRVLAAHADDNILEAFORPLDHTHTAMDI FOLSEEVYANNRROKAVN	422
QY	422	YGVIVGIDSYGLAONLINTRKEAFAFIERYPASFPGVKOYMENIYOEAKOKGVYTTLLHR	481
Db	423	YGVIVGIDSYGLAONLINTRKEAFAFIERYPASFPGVKOYMENIYOEAKOKGVYTTLLHR	482
QY	482	RRYLPDITSRNFNVSFAERTAMNTPIQSSADIKKAMIDLAARKEOQLARLLQVH	541
Db	483	RRYLPDITSRNFNVSFAERTAMNTPIQSSADIKKAMIDLAARKEOQLARLLQVH	542
QY	542	DELLIEAPKEETIERLCELVPEVMEQAVTLRVPLKVDYHNGPMTYADK	588
Db	543	DELLIEAPKEETIERLCELVPEVMEQAVTLRVPLKVDYHNGPMTYADK	589

RESULT 6
 US-08-510-215A-2
 Sequence 2, Application US/08510215A
 Patent No. 5814506
 GENERAL INFORMATION:
 APPLICANT: KONG, HuiMin
 APPLICANT: PELLETIER, John J.
 APPLICANT: ALIOTTA, Jason M.
 TITLE OF INVENTION: OVER-EXPRESSION AND PURIFICATION OF
 TITLE OF INVENTION: A TRUNCATED THERMOSTABLE DNA POLYMERASE BY PROTEIN
 TITLE OF INVENTION: FUSION
 NUMBER OF SEQUENCES: 414
 CORRESPONDENCE ADDRESS:
 ADDRESSEE: GREGORY D. WILLIAMS, NEW ENGLAND
 ADDRESSEE: BIOLABS, INC.
 STREET: 32 TOZER ROAD
 CITY: BEVERLY
 STATE: MASSACHUSETTS
 COUNTRY: US
 ZIP: 01915
 COMPUTER READABLE FORM:
 MEDIUM TYPE: FLOPPY disk
 COMPUTER: IBM PC compatible
 OPERATING SYSTEM: PC-DOS/MS-DOS
 SOFTWARE: PatentIn Release #1.0, Version #1.25
 CURRENT APPLICATION DATA:
 APPLICATION NUMBER: US/08-510,215A
 FILING DATE: 02-AUG-1995
 CLASSIFICATION: 415
 ATTORNEY/AGENT INFORMATION:
 NAME: WILLIAMS, GREGORY D.
 REGISTRATION NUMBER: 30901

```

? REFERENCE/DOCKET NUMBER: NEB-113
? TELECOMMUNICATION INFORMATION:
? TELEPHONE: (508) 927-5054
? TELEFAX: (508) 927-1705
? INFORMATION FOR SEQ ID NO: 2:
? SEQUENCE CHARACTERISTICS:
? LENGTH: 876 amino acids
? TYPE: amino acid
? TOPOLOGY: linear
? MOLECULE TYPE: protein
?
US-08-510-215A-2

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Query Match      98.3%; Score 2915; DB 2; Length 876;
Best Local Similarity 98.6%; Pred. No. 8.2e-210;
Matches 579; Conservative 2; Mismatches 6; Indels 0; Gaps 0

QY      2 AEGEKPLEMEFAIVDVTTEMLADKALVVEEENYHADAPIGIALVNEHGRFFMRPE 61
Db      290 AEGEKPLEMEFAIVDVTTEMLADKALVVEEENYHADAPIGIALVNEHGRFFMRPE 349
QY      62 TALDQSGLALADETKKSMFPAKRAVALAKMGIELRGVAFDILLAAYLINPNODAGD 121
Db      350 TALDQSGLALADETKKSMFPAKRAVALAKMGIELRGVAFDILLAAYLINPNODAGD 409
QY      122 IAAVAKMKQYAVRSDAEAVYKGYKRSPLPDEQTLAEHLVYKAAIWALEOPFMDLRNNE 181
Db      410 IAAVAKMKQYAVRSDAEAVYKGYKRSPLPDEQTLAEHLVYKAAIWALEOPFMDLRNNE 469
QY      182 QDOLLTKLEHLLAAI LAEMFTGVNVDIKLEBOMGSELAEOURLAIEOR IYELAGGEFNIN 241
Db      470 QDOLLTKLEHLLAAI LAEMFTGVNVDIKLEBOMGSELAEOURLAIEOR IYELAGGEFNIN 529
QY      242 SPKQLGVLFELFKLOLPVTKTKTGSTGSDVLEKLAIPHHEIYENILHTRQLGKLOSTYIE 301
Db      530 SPKQLGVLFELFKLOLPVTKTKTGSTGSDVLEKLAIPHHEIYENILHTRQLGKLOSTYIE 589
QY      302 GLKVVVRPDKVHFMFQNALTOGRLASABPNLONIPRLPBGKIKIOAFVPSBPDMLI 361
Db      590 GLKVVVRPDKVHFMFQNALTOGRLASABPNLONIPRLPBGKIKIOAFVPSBPDMLI 649
QY      362 FAADYSQIETELVLAHIADDDNLIEAFQSDLDIHTKTANDIFOLSEEEVYANMRROAKAVN 421
Db      650 FAADYSQIETELVLAHIADDDNLIEAFQSDLDIHTKTANDIFIVSEEEVYANMRROAKAVN 709
QY      422 YGIYVGISDYGLAQNLTITRKEAAEFIERYPASFGVKQYMNIVOEAKOKGYVTTL LHR 481
Db      710 YGIYVGISDYGLAQNLTITRKEAAEFIERYPASFGVKQYMNIVOEAKOKGYVTTL LHR 769
QY      482 RRYLPDITSRNPNNRSFARTAMNTPIOGSADDIKKAMIDLAALKBEOQLARLLLOVH 541
Db      770 RRYLPDITSRNPNNRSFARTAMNTPIOGSADDIKKAMIDLAALKBEOQLARLLLOVH 829
QY      542 DELILEAPKEETIERLCSELVPEVMEQAVTLRLPYLKYDHYXGPTWYADK 588
Db      830 DELILEAPKEETIERLCSELVPEVMEQAVTLRLPYLKYDHYXGPTWYADK 876

RESULT 7
US-09-517-871-20
; Sequence 20, Application US/09517871
; Patent No. 6436677
; GENERAL INFORMATION:
; APPLICANT: Hartnett, John R.
; APPLICANT: Huang, Fen
; APPLICANT: Gu, Trent
; TITLE OR INVENTION: Method of Reverse Transcription
; FILE REFERENCE: PMWG-03833
; CURRENT APPLICATION NUMBER: US/09/517, 871
; NUMBER OF SEQ ID NOS: 24
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 20
; LENGTH: 876

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